

*N.E.
duplicates*

On page 16, line 27, please delete "Figure 10 illustrates" and insert in place thereof --Figures 10(1) and 10(2) illustrate--.

On page 16, line 27, please delete "Figure 10 illustrates" and insert in place thereof --Figures 10(1) and 10(2) illustrate--.

On page 17, line 1, please delete "Figure 12 is a flow diagram" and insert in place thereof --Figures 12(1), 12(2), 12(3), 12(4), and 12(5) are flow diagrams--.

61

On page 18, line 26, please delete "Figure 12 is a flow diagram" and insert in place thereof --Figures 12(1), 12(2), 12(3), 12(4), and 12(5) are flow diagrams--.

62

IN THE CLAIMS

Please cancel claims 5-15.

Please amend the claims as follows:

63

1. (AMENDED) A method of generating a configuration for a system [configuring a system] comprising the steps of:

defining in said computer system an element model consisting of elements used to configure said system and structural relationships between said elements in said model;

creating in [generating by] said computer system a plurality of components of said system that are instances of one or more elements of said model [a system configuration] in response to [based on] configuration requests [and said element model; and].

53 [displaying by said computer system a graphical representation of said system configuration and said structural relationships between said elements of said system configuration.]

2. (UNCHANGED) The method of claim 1 such that said configuration requests are element requests, resource requests, and needs identifications.

3. (UNCHANGED) The method of claim 1 including the step of generating by said computer system a Bill of Materials report containing a part number and description for each component and spare part in said system configuration, resource totals, failed requests, and failed optional requests.

4. (UNCHANGED) The method of claim 1 further including the steps of:

bundling by said computer system said elements of said system configuration into product groupings; and
generating a price quotation for said system configuration.

5 16. (NEW) The method of claim 1 further comprising the steps of:
84 identifying one or more of said plurality of components that can satisfy constraints of said plurality of components;
creating a second plurality of components to satisfy constraints if said constraints cannot be satisfied by said one or more of said plurality of components. 62

6
17. (NEW) An article of manufacturing comprising:

a computer usable medium having computer readable program code embodied therein for generating a configuration for a system, said system configuration specifying a plurality of components that comprise said system comprising:

34 computer readable program code configured to cause a computer to receive a configuration request;

computer readable program code configured to cause a computer to create an instance of a component in said system configuration in response to said configuration request;

computer readable program code configured to cause a computer to satisfy a plurality of constraints of said component. 6

18. (NEW) The article of manufacture of claim 17 wherein said configuration request is a request for a component. 6

19. (NEW) The article of manufacture of claim 17 wherein said configuration request is a request that identifies a need in said system. 6

20. (NEW) The article of manufacture of claim 17 wherein said configuration request is a request for a resource for said system. 6

21. (NEW) The article of manufacture of claim 17 further comprising:

computer readable program code configured to cause a computer to define a model that includes a definition for each of a plurality of

components selectable for inclusion in said system configuration and constraints on said plurality of components. ¹⁰

✓ ~~22.~~ (NEW) The article of manufacture of claim ~~21~~ wherein said computer readable code configured to cause a computer to create an instance of a component further comprises:

computer readable program code configured to cause a computer to examine said model to select said component using said component's definition in said model;

By
computer readable program code configured to cause a computer to create an instance of said component in said system configuration using said component's definition in said model. ¹⁰

✓ ~~23.~~ (NEW) The article of manufacture of claim ~~21~~ wherein said computer readable code configured to cause a computer to satisfy said plurality of constraints of said component further comprises:

computer readable program code configured to cause a computer to identify said plurality of constraints of said component by examining said model;

computer readable program code configured to cause a computer to identify one or more components of said system configuration satisfy said plurality of constraints;

computer readable program code configured to cause a computer to create a new component in said system configuration to satisfy said plurality

of constraints if said system configuration cannot satisfy said plurality of constraints.

Sub C 24. (NEW) An article of manufacturing comprising:

a computer usable medium having computer readable program code embodied therein for satisfying a constraint in a system configuration comprising:

computer readable program code configured to cause a computer to identify a component of said system configuration having a constraint;

computer readable program code configured to cause a computer to determine whether said system configuration can satisfy said constraint;

creating a new component in said system configuration to satisfy said constraint if said system configuration cannot satisfy said constraint.

4 25. (NEW) The article of manufacture of claim 24 wherein said computer readable code configured to cause a computer to identify a component of said system configuration having a constraint further comprises:

computer readable program code configured to cause a computer to define a model that includes definitions for a plurality of components selectable for inclusion in said system configuration and constraints on said plurality of components;

computer readable program code configured to cause a computer to examine said model to determine whether said constraints on said plurality of components includes said constraint.

~~-26.~~ (NEW) The article of manufacture of claim ~~24~~ wherein said computer readable code configured to cause a computer to determine whether said system configuration can satisfy said constraint further comprises:

computer readable program code configured to cause a computer to examine said system configuration to determine whether another component of said system configuration is available to satisfy said constraint. *By*

~~-27.~~ (NEW) The article of manufacture of claim ~~26~~ wherein said computer readable code configured to cause a computer to examine said system configuration to determine whether another component of said system configuration is available to satisfy said constraint further comprises:

computer readable program code configured to cause a computer to identify a destination component of said system configuration having available ports;

computer readable program code configured to cause a computer to determine whether one of said available ports is compatible with a port of said component;

computer readable program code configured to cause a computer to connect said one of said available ports with said port of said component if said compatibility exists. *By*

Sub C 27

28. (NEW) The article of manufacture of claim 27 wherein said computer readable code configured to cause a computer determine whether one of said available ports is compatible with a port of said component further comprises:

BS
computer readable program code configured to cause a computer to determine whether the physical type and logical type of said one of said available ports is compatible with said port of said component.~

29. (NEW) The article of manufacture of claim 27 wherein said computer readable code configured to cause a computer determine whether one of said available ports is compatible with a port of said component further comprises:

computer readable program code configured to cause a computer to determine whether a transfer path exists between said one of said available ports and said port of said component.~